

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Silanised, structurally modified pyrogenically produced silicas, characterized by surfaces having fixed thereto vinyl groups or vinyl silyl groups fixed to the surface, and hydrophobic groups selected from such as trimethyl silyl, and/or dimethyl silyl, and/or monomethyl silyl or mixtures thereof additionally being fixed to the surface, and by having the following physico-chemical properties:

BET surface area m ² /g:	25 – 400
Average primary	
Particle size nm:	5 – 50
pH:	3-10
Carbon content %:	0.1-10
DBP value %:	<200 or not determinable.

2. (Currently Amended) The process for producing the silanised, structurally modified silicas according to claim 1, comprising a) treating pyrogenically produced silicas with a surface-modifying agent(s), suitable for fixing vinyl groups or vinyl silyl groups and hydrophobic groups selected from trimethyl silyl, dimethyl silyl, monomethyl silyl or mixtures thereof to the surface of silica, to form a mixture, b) heat treating the mixture, c) structurally modifying the heat treated mixture by mechanical action to form low structured, pyrogenic silica and d) recovering the silanized, structurally modified pyrogenically produced silica, having surfaces fixed thereto vinyl groups or vinyl silyl groups, and hydrophobic groups selected from trimethyl silyl, dimethyl silyl, -monomethyl silyl or mixtures thereof.

3. (Previously Presented) The process for producing the silanised, structurally modified silicas according to claim 2, wherein the silica treating step includes spraying the silicas first with water and then with the surface-modifying agent.

4. (Previously Presented) The process for producing the silanised, structurally modified silica according to claim 2, wherein the silica treating step includes treating the silica with the surface-modifying agent in vapour form.
5. (Previously Presented) The process for producing the silanised, structurally modified silica according to claim 3, further comprising post-grinding and/or conditioning the structurally modified silica.
6. (Previously Presented) The process for producing the silanised, structurally modified silica according to claim 4, further comprising grinding and/or conditioning the structurally modified silica.
7. (Previously Presented) A silicone rubber containing as a filler the silanised, structurally modified silica according to claim 1.
8. (Previously Presented) The process according to claim 3 further comprising, prior to heat treatment step, further mixing the treated silica mixture.